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CONFIDENTIAL

Date: February 22, 2010

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Examiner Lynn Bristol

U.S. Patent & Trademark Office

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20825-0004

Message:

U.S. Application No. 10/799,417

Applicant: Paul A. Krieg

Title: "METHODS FOR MODULATING ANGIOGENESIS WITH APPLIN COMPOSITIONS"

Our Ref. No.: 20825-0004

Dear Examiner Bristol:

In response to our telephone conference on Friday, February 19th, attached please find a revised set of claims. I look forward to speaking with you in the near future.

Regards.

Re:

Wilham L. Warren Reg. No. 36,714

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U.S. Utility Patent Application Serial No. 10/799,417 entitled, "METHODS FOR MODULATING ANGIOGENESIS WITH APELIN COMPOSITIONS"

PROPOSED AMENDMENTS AS OF FEB 23, 2010 FOR DISCUSSION ONLY – DO NOT ENTER

- 1. (Currently Amended) A method of inhibiting angiogenesis in a <u>patient in need thereof</u> biological sample, comprising
 - a. providing a biological-sample; and
 - b. combining the biological sample in vivo with administering to the patient an angiogenesis-inhibiting amount of a composition comprising an inhibitor of apelin activity an anti-apelin antibody or fragment thereof that binds apelin polypeptide of SEQ ID NO:4 and inhibits angiogenesis, wherein the angiogenesis is characterized by in vivo generation of a new blood vessel from an existing blood vessel.

2.-4. (Canceled)

- 5. (Original) The method of Claim 1, wherein the composition further comprises an anticancer agent and wherein the anti-cancer agent is selected from the group consisting of a chemotherapeutic agent, a radiotherapeutic agent, an anti-angiogenesis agent, and an apoptosis-inducing agent.
- 6. (Previously Presented) The method of Claim 5, wherein the composition comprises an anti-angiogenesis agent that inhibits an angiogenic factor selected from the group consisting of VEGF (VEGF-A), VEGF-B, VEGF-C, VEGF-D, VEGF-E, PIGF, acidic fibroblast growth factor (FGF-1), basic fibroblast growth factor (FGF-2), PDGFB, EGF, LPA, HGF, PD-ECF, IL-8, angiogenin, TNF-alpha, TGF-beta, TGF-alpha, proliferin, and PLGF.

7.-20. (Canceled)

- (Original) The method of Claim 1, wherein the composition comprises a pharmaceutically acceptable carrier.
- 22. (Currently Amended) The method of Claim 1, wherein the <u>patient is a mammal</u> biological sample is a mammalian biological-sample.
- 23. (Currently Amended) The method of Claim 1, wherein the <u>patient is a human biological</u> sample is a human biological sample.

24-25. (Canceled)

- 26. Currently Amended) The method of Claim 1 24, wherein the patient has a disease or condition involving angiogenesis.
- 27. (Canceled)
- 28. (Currently Amended) The method of Claim 24, further comprising
 - e. administering to the patient a therapeutically effective amount of an anti-cancer agent,

wherein the anti-cancer agent is selected from the group consisting of a chemotherapeutic agent, a radiotherapeutic agent, an anti-angiogenic agent, and an apoptosis-inducing agent.

- 29. (Original) The method of Claim 28, wherein the anti-cancer agent is an anti-angiogenic agent.
- 30. (Previously Presented) The method of Claim 28, wherein the anti-angiogenic agent is an inhibitor of an angiogenic factor selected from the group consisting of VEGF (VEGF-A), VEGF-B, VEGF-C, VEGF-D, VEGF-E, PIGF, acidic fibroblast growth factor (FGF-1), basic fibroblast growth factor (FGF-2), PDGFB, EGF, LPA, HGF, PD-ECF, IL-8, angiogenin, TNF-alpha, TGF-beta, TGF-alpha, proliferin, and PLGF.

31.-59. (Canceled)

- 60. (New) A method of inhibiting angiogenesis in a biological sample, comprising contacting the biological sample with an angiogenesis-inhibiting amount of a composition comprising an anti-apelin antibody or fragment thereof that binds the apelin polypeptide of SEQ ID NO:4 and inhibits angiogenesis, wherein the angiogenesis is characterized by *in vivo* generation of a new blood vessel from an existing blood vessel.
- 61. (New) The method of Claim 60, wherein the biological sample is a mammalian biological sample.
- 62. (New) The method of Claim 60, wherein the biological sample is a human biological sample.